

REMARKS

After entry of this Amendment, claims 1 and 3–5 will be pending. Claim 2 is canceled and claims 6-10 are withdrawn. The specification is amended to correct an obvious error in ¶0025 and to add references to the amended drawings. The drawings are amended to bring them into conformance with the specification as filed (in particular, ¶0008 and the original claims) and U.S. Patent No. 5,889,694, which was incorporated by reference. Hence, no new matter is added.

In the Office Action dated November 2, 2004, the Examiner first rejected claims 1-5 under 35 U.S.C. §112, first paragraph, as lacking support for “a decoding circuitry for addressing specific information as claimed in these claims.” At ¶0008, the specification states:

The present invention accomplishes this by including the decoding circuitry on each memory layer thereby eliminating the need for a base layer comprising bit line decoding circuitry and thereby dramatically reducing the number of layer interconnects to just power and a few address and data lines.

Moreover, as noted above and as permitted by MPEP §2163.07(b), the present application incorporates the '694 patent by reference, and expressly refers to this patent for its disclosure of decoding circuitry; *see* ¶0029 of the specification. Decoding circuitry consistent with the present claims and the amended drawings is described in the '694 patent at col. 7, line 7 *et seq.* with reference to Fig. 3.

The Examiner further rejected claim 3 under §112, alleging that the recitation “only a subset of the said applied electrical signals that act as the control inputs to said decoding circuitry” lacks support in the specification. To the extent that the rejection is not fully addressed by the foregoing amendment, we refer to ¶0027, which states:

For example, if the data lines of each layer were interconnected by vias and separation was instead accomplished by having some address lines connected to specific layers so as to in effect enable only a single layer at a time and thereby multiplex the data connections. This would be the equivalent of implementing the selective powering of the device as is disclosed in U.S. Patent 5,889,694 whereby each individually powered section of the device was comprised in a separate layer.

Accordingly, we respectfully submit that the amended claim language is fully supported by the specification.

Finally, the Examiner rejected claim 4 under §112, alleging that “there is no support from the specification and the drawings for a decoding means for causing a first voltage on one of the conductive means and a decoding means for causing a second voltage on one of the conductive means.” To the extent that the rejection is not fully addressed by the foregoing amendment, we refer first to the decoding circuitry now illustrated in the drawings, and also to the ’694 patent at, for example, col. 8, lines 30-56.

The Examiner objected to the disclosure under 37 C.F.R. §1.71, pointing specifically to the reference to Kato. This is provided solely for background, and merely notes his disclosure of heat-sink layers bonded between memory circuit layers to help reduce overheating.

The Examiner rejected claims 1 and 2 under 35 U.S.C. §102(b) as anticipated by Roesner, contending that this reference discloses “two layers of memory circuitry (12, 13, 14, figures 1 and 2) each comprising circuit for storing and retrieving information (14) and a decoding circuitry[.]” In fact, Roesner’s design does not provide storage and decoding circuitry *in a single layer*, as required by the present claims. Rather, the storage circuitry is in one layer (14) while the decoding circuitry is in a separate, underlying layer (12). See col. 3, lines 50-51 and col. 4, lines 7-9.

In light of the foregoing, we respectfully submit that all claims are now in condition for allowance. If the Examiner believes that a telephone conversation with Applicant's attorney would expedite allowance of this application, the Examiner is invited to call the undersigned attorney at (617) 570-1241.

Included herewith is a petition for a two-month extension of time. If any additional fee is occasioned by this paper, please charge said fee to our Deposit Account No. 07-1700.

Respectfully submitted,



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Amendments to the Drawings

The attached sheets of drawings include changes to Figs. 1-6. These sheets replace the original sheets including Figs. 1-6.

Attachment: Replacement Sheets